

August 17 - August 23, 2001

The Terra spacecraft is in nominal mode. All instruments are in nominal science mode.

The MOPITT instrument continues to operate on one cooler with Chopper 3 in the fully open position. Analysis indicates that a blown fuse is responsible for the problem with Chopper 3. A report summarizing the chopper anomaly and its diagnosis will be released shortly by the MOPITT team, along with a final report on the cooler displacer anomaly in May.

The MOPITT team believes that maneuvers about the spacecraft X-axis (roll) are the most likely, of all planned maneuvers, to result in movement of the chopper out of its current position. The Terra Flight Operations Team provided the MOPITT team with the rates and accelerations for all planned maneuvers in order for the team to conduct a full assessment of risk to the MOPITT chopper as a result of future maneuvers. MODIS calibration roll maneuvers are conducted almost every month.

The bi-monthly on-orbit calibration experiment for MISR took place on August 17. This event included the first use of the revised on-line procedures designed to prevent any possibility of operating the goniometer in the manner that resulted in the MISR instrument shutdown in May. The new procedures worked successfully.

Several MDA2BITE trips (High Gain Antenna Motor Drive Assembly opto-coupler Single Event Upsets) occurred during this reporting period with no resultant non-recoverable data loss. One event on August 23 resulted in the loss of a small amount of MODIS science data (40,000 CADUs) due to the inability to perform a replay due to the loss of telemetry. On August 20, a change in the Tracking and Data Relay Satellite System (TDRSS) schedule due to Shuttle operations resulted in an ASTER data loss.